MASTER

XI

DAMAGING HAILSTORMS

All the hailstorms which have caused damage or were sufficiently severe to be likely to have caused damage to crop or glass and which are mentioned in the various volumes of British Rainfall and the Meteorological Magazine during the years 1906-1955 have been listed.

Examination of these records shows that the monthly distribution was as follows:

January	2
February	2
March	1
April	9
May	25
June	44
July	41
August	25
September	14
October	4
November	2
December	0

Total for England, Scotland and Wales - 169 in 50 years,

Of the storms which were listed as causing severe danage, 14 occurred in May, 20 in June and 28 in July.

The location of these storms was listed under counties. The number per county will depend on three main factors:-

(a) the county area
(b) the efficiency of reporting
(c) the extent to which damage is possible (a hailstorm in the Peak might do no damage, whatever its intensity).

We have to accept the deficiencies of (b) and factor (c) is eliminated if we require the frequency and distribution of damaging hailstorms as distinct from hailstorms (with or without damage).

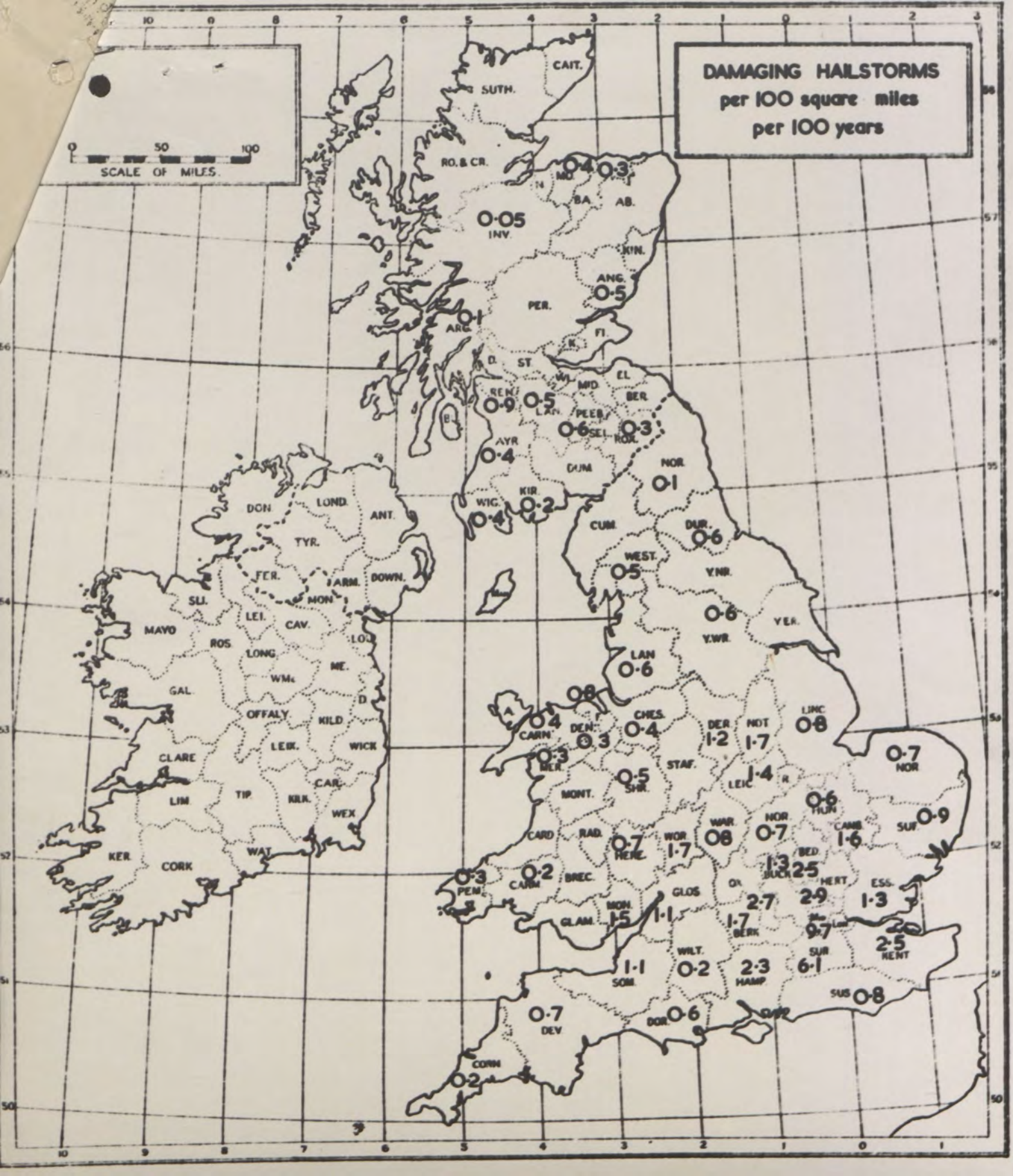
The distribution of damaging hailstorms per 100 years per 100 square miles is as follows:-

9.7 Middlesex and London
6.1 Surrey
2.9 Hertfordshire
2.7 Oxfordshire
2.5 Kent, Bedfordshire
2.3 Hampshire
1.7 Berkshire, Worcestershire and Nottinghamshire
1.6 Cambridgeshire
1.5 Monmouth
1.4 Leicestershire
1.3 Essex and Buckinghamshire
1.2 Derbyshire
1.1 Somerset and Gloucestershire
1.0 to 0.6: Yorkshire, Lincolnshire, Devon, Norfolk, Suffolk, Sussex, Lancashire, Warwick, Dorset, Hereford, Durham, Huntingdonshire, and Northamptonshire, Flint, Renfrew.
0.5 and below: Cheshire, Shropshire, Stafford, Wiltshire, Cornwall, Northumberland, Cumberland and Westmorland. Most of Scotland and Wales.

These figures, when plotted on a map, show a fairly consistent pattern. Numerically speaking, it is likely that the Surrey and Middlesex figures are too high, due to over-reportage; Buckinghamshire is probably too low and Oxfordshire too high.

The risks of damage are clearly greatest in the Home Counties with secondary maxima around the Peak District (Nottinghamshire, Leicestershire and Derbyshire) and around the head of the Bristol Channel (Worcestershire, Monmouth, Somerset and Gloucestershire). Nevertheless, even allowing for the fact that not every hailstorm which has caused damage has been included in the figures, it is not unreasonable to suggest that the risk of any particular locality being extensively damaged twice in a lifetime is very small.

M.O.19.
January, 1956.
AB.


DAMAGING HAILSTORMS
per 100 square miles
per 100 years
SCALE OF MILES.
0
50
100
CAIT.
SUTH.
RO. & CR.
0·4
0·3
N
MO
BA.
AB.
0·05
INV.
KIN.
ANG.
0·5
PER.
ARG.
0·1
FI.
K.
D.
ST
WI.
MID.
EL.
REN.
0·9
0·5
LAN.
PEEB.
BER.
0·6
SEL.
0·3
ROX.
AYR
0·4
DUM.
NOR.
0·1
WIG.
0·4
KIR.
0·2
DON.
LOND.
ANT.
TYR.
CUM.
DUR.
0·6
WEST.
0·5
Y.NR.
FER.
ARM.
DOWN.
MON.
SLI.
0·6
YER.
LEI.
CAV.
MAYO
ROS
LONG.
LO.
Y.WR.
0·6
LAN
ME.
WMs.
GAL.
0·8
D.
OFFALY
KILD
CHES.
0·4
DEN.
0·3
CARN.
0·4
DER.
1·2
NOT.
1·7
LINC.
0·8
0·7
NOR.
CLARE
LEIX.
WICK
0·3
MER.
0·5
SHR.
STAF.
LEIC.
1·4
R.
LIM.
TIP.
KILK.
CAR.
MONT.
0·6
HUN.
WEX
CARD.
RAD.
0·7
HERE.
WOR.
1·7
WAR.
0·8
NOR.
0·7
CAMB.
1·6
SUF.
0·9
KER.
WAT.
CORK
0·3
PEM.
0·2
CARM.
BREC.
1·3
BUCK.
2·5
BED.
HERT.
ESS.
1·3
GLOS.
2·7
2·9
MON.
1·5
1·1
GLAM.
1·7
BERK.
0·7
SUR.
2·5
KENT
WILT.
1·1
SOM.
0·2
2·3
HAMP.
6·1
SUS.
0·8
0·7
DEV.
DOR.
0·6
CORN.
0·2